

# **COUNTY OF LOS ANGELES**

# **DEPARTMENT OF PUBLIC WORKS**

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE ALHAMBRA, CALIFORNIA 91803-1331 Telephone: (626) 458-5100 http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO: P.O. BOX 1460 ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE REFER TO FILE: SM-1

February 5, 2019

Mr. Greg Ramirez, City Manager City of Agoura Hills 30001 Ladyface Court Agoura Hills, CA 91301

Attention Ms. Kimberly Rodrigues

Dear Mr. Ramirez:

CONSOLIDATED SEWER MAINTENANCE DISTRICT CONDITION ASSESSMENT PROGRAM REPORT PROJECT NO. Y0TV1314A2

This letter is to inform you that Los Angeles County Public Works Consolidated Sewer Maintenance District has completed its condition assessment of the City of Agoura Hills' sewer system.

The enclosed Condition Assessment Report provides details regarding the maintenance and structural condition of your sewer mainlines. Please note that two previous reports covering the balance of your system were transmitted to your City on December 9, 2008, and July 9, 2013. The information contained in all three reports should be included in your agency's Sewer System Management Plan as a reference in Chapter 8, System Evaluation and Capacity Assurance Plan.

The segments with critical maintenance issues have been cleaned and, where appropriate, incorporated into our enhanced maintenance schedule for continued monitoring. In addition, segments with severe structural defects have either been repaired or will be scheduled for corrective action as part of the ongoing Accumulative Capital Outlay Program.

Mr. Greg Ramirez February 5, 2019 Page 2

If you have any questions regarding this report or the Condition Assessment Program, please contact Ms. Kari Eskridge, Sewer Maintenance Division, at (626) 300-3390, Monday through Thursday, 7 a.m. to 5 p.m. or at <a href="maintenance-weekerldge@dpw.lacounty.gov">keskridge@dpw.lacounty.gov</a>.

Very truly yours,

MARK PESTRELLA Director of Public Works

WILLIAM J. WINTER

Assistant Deputy Director Sewer Maintenance Division

Sewer Maintenance Divis

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# CONDITION ASSESSMENT REPORT LOS ANGELES COUNTY PUBLIC WORKS CONSOLIDATED SEWER MAINTENANCE DISTRICT

#### 100% SUMMARY

SUP.	3	City:	Agoura Hills
DISTRICT(S)			
Report By:	Jonathan Gonzalez	Report Date:	9/17/2018

#### INTRODUCTION

As part of the Sewer Condition Assessment Program, the Los Angeles County Public Works Consolidated Sewer Maintenance District (District) has completed the closed-circuit television inspection of 275,522 feet or 100 percent of the City of Agoura Hills' (City) sewer system.

The closed-circuit television inspection of the City was completed in three projects (Project Nos. Y0TV0506F, Y0TV0910A, and Y0TV1314A2). A copy of the Condition Assessment Reports for Project Nos. Y0TV0506F and Y0TV0910A can be found in the District's website at <a href="http://dpw.lacounty.gov/smd/cctv/city/">http://dpw.lacounty.gov/smd/cctv/city/</a>. Enclosed for your reference is the Condition Assessment Report for Project No. Y0TV1314A2.

# SUMMARY MAINTENANCE REPORT

Our inspection revealed that approximately 83.2 percent of the system televised was free of significant blockages or restrictions that would impede sewer flows. The remaining 16.8 percent of the inspected pipe segments within the City had a Pipeline Assessment and Certification Program (PACP) maintenance grade of 3, 4, or 5 as indicated in the Quick Maintenance Rating Table shown below. These segments have been addressed with corrective action taken as noted in the enclosed reports.

# **QUICK MAINTENANCE RATING TABLE**

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. OF SEGMENTS
1: Minor	153,402	55.7	724
2: Minor to Moderate	75,620	27.5	324
3: Moderate	24,096	8.7	109
4: Significant	16,906	6.1	80
5: Most Significant	5,498	2.0	29
TOTAL	275,522	100.0	1,266

# **SUMMARY STRUCTURAL REPORT**

Our inspection revealed that approximately 96.0 percent of the inspected pipe segments within the City were free of significant structural defects. The remaining 4.0 percent of the inspected pipe segments had a PACP structural grade of 4 or 5 as indicated in the Quick Structural Rating Table shown below. The priority lists for these items are located in the enclosed reports.

# **QUICK STRUCTURAL RATING TABLE**

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. OF SEGMENTS
1: Minor	239,969	87.0	1,114
2: Minor to Moderate	19,213	7.0	79
3: Moderate	5,403	2.0	23
4: Significant	8,251	3.0	37
5: Most Significant	2,686	1.0	13
TOTAL	275,522	100.0	1,266

### CONDITION ASSESSMENT REPORT LOS ANGELES COUNTY PUBLIC WORKS CONSOLIDATED SEWER MAINTENANCE DISTRICT

PROJECT NAME: Y0TV1314A2 PROJECT MGR: ERIC LIU

PROJECT DATE: 02/24/15 CONTACT NO: (626) 300-3369 SUP. DISTRICT(s): 3 MAP PAGE(S): 1090, 1091, 1118

Report By: Jonathan Gonzalez Report Date: 8/17/18

#### INTRODUCTION

The District conducted a condition assessment of 88,884 feet or 32.3 percent of the City's entire sewer system as part of Project No. Y0TV1314A2.

The enclosed Condition Assessment Report outlines the structural and maintenance ratings of your system based on the PACP's (Version 6.0.1) rating methodology. Included in the report are the following:

- Project Overview Map (Enclosure 1)
- Quick Maintenance Rating Map, High Water Levels List and Map, Infiltration List and Map, and sample lateral notice (Enclosure 2)
- Quick Structural Rating Report Priority List and Quick Structural Rating Priority Map (Enclosure 3)

The Sewer Condition Assessment Program utilizes the PACP Quick Rating methodology to rank the structural and maintenance condition of your system based on industry standards.

# PROJECT AREA AND DESCRIPTION

Project No. Y0TV1314A2 included sewer lines located in the unincorporated County of Los Angeles and the Cities of Agoura Hills, Calabasas, Hidden Hills, Malibu, and Santa Clarita. Enclosed for your reference is an overview map of the project area within your City (Enclosure 1).

#### **DEFECT GRADE DESCRIPTION**

The Quick Rating indicates the number of occurrences for the highest severity grade for each pipe segment for either maintenance or structural defects. A grade of 1 indicates that a pipe segment is in excellent condition with minor defects while a grade of 5 indicates that a pipe segment may require immediate attention. A legend of the five possible defect grades is as follows:

Grade	<b>Defect Grade Description</b>
1:	MINOR
2:	MINOR TO MODERATE
3:	MODERATE
4:	SIGNIFICANT
5:	MOST SIGNIFICANT

#### **MAINTENANCE REPORT**

Our inspection revealed that approximately 81.2 percent of the system televised in your City as part of Project No. Y0TV1314A2 was free of significant blockages or restrictions that would impede sewer flows. The remaining 18.8 percent of the pipe segments within the City had a PACP maintenance grade of 3, 4, or 5 as indicated in the Quick Maintenance Rating Table shown below. These segments have been incorporated into our periodic cleaning schedule with corrective action taken.

A color-coded map showing the quick maintenance rating for each pipe segment is provided in Enclosure 2.

# **QUICK MAINTENANCE RATING TABLE**

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. OF SEGMENTS
1: Minor	48,455	54.5	240
2: Minor to Moderate	23,714	26.7	107
3: Moderate	7,628	8.6	36
4: Significant	6,992	7.9	32
5: Most Significant	2,095	2.3	10
TOTAL	88,884	100.0	425

#### Lateral Notices

Also included in the maintenance inspection reports are private lateral deficiencies discovered during the assessment of the mainline. The District does not maintain lateral lines. It is the responsibility of the property owner to maintain their respective lateral lines to facilitate the flow of wastewater from their property to the mainline. Letters have been sent to property owners in your City notifying them of the maintenance issues detected in their laterals. A sample lateral notice letter is provided in Enclosure 2 for your reference

### High Water Levels

Our inspection revealed that approximately 99.4 percent of the system televised has adequate capacity. Approximately 0.6 percent of the segments inspected exhibited visual signs associated with high water levels. The capacity of the sewer pipe can be determined by analyzing several PACP codes, including Water Level, Water Mark, and miscellaneous remarks, which indicate the camera was underwater or there were sags in the line. A sewer pipe is considered at capacity when 50 percent of the diameter of the sewer pipe is full of water. However, there are conditions in which the Water Level or Water Mark has reached 50 percent or greater due to heavy flows in adjoining pipes, a temporary stoppage caused by debris in the sewer lines, or a sag in the line. Therefore, additional review of these pipe segments was conducted to determine if any capacity issues exist.

All sewer pipes where the Water Level, Water Mark, and miscellaneous remarks of camera underwater or sags in the line are at or above 50 percent capacity have been listed and analyzed on the High Water Level Table in Enclosure 2. The nature of these high water level conditions is also summarized on this table.

A map showing the sewer lines with high water levels is provided in Enclosure 2.

#### Infiltration

Our inspection revealed that approximately 0.4 percent of the system included in your City as part of Project No. Y0TV1314A2 has infiltration within the pipe segments. Infiltration is the ingress of groundwater into the sewers through a defect or porous area of the pipe wall. All sewer pipes where infiltration was found are listed on the Infiltration Table in Enclosure 2. This table also provides the proposed corrective action for these impacted sewer segments. If a corrective action is proposed, the work will be programmed in the next 24 months as part of our ongoing Accumulative Capital Outlay Program.

A map showing the sewer lines with infiltration is provided in Enclosure 2.

# STRUCTURAL REPORT

Our inspection revealed that approximately 90.3 percent of the inspected pipe segments within the City were free of severe structural defects. The remaining 9.7 percent of the inspected pipe segments had a PACP structural grade of 4 or 5 as indicated in the Quick Structural Rating Table shown below. These segments have been placed on a priority list based on the severity and the need for action. For items 1 through 40 in the Quick Structural Rating Report Priority List (Enclosure 3), which warrant a corrective action, the proposed corrective action will be programmed in the next 24 months as part of the ongoing Accumulative Capital Outlay Program.

A color-coded map showing the Quick Structural Rating for each pipe segment is located in Enclosure 3.

# **QUICK STRUCTURAL RATING TABLE**

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. OF SEGMENTS
1: Minor	66,275	74.7	328
2: Minor to Moderate	10,421	11.7	43
3: Moderate	3,503	3.9	14
4: Significant	7,064	7.9	32
5: Most Significant	1,621	1.8	8
TOTAL	88,884	100.0	425

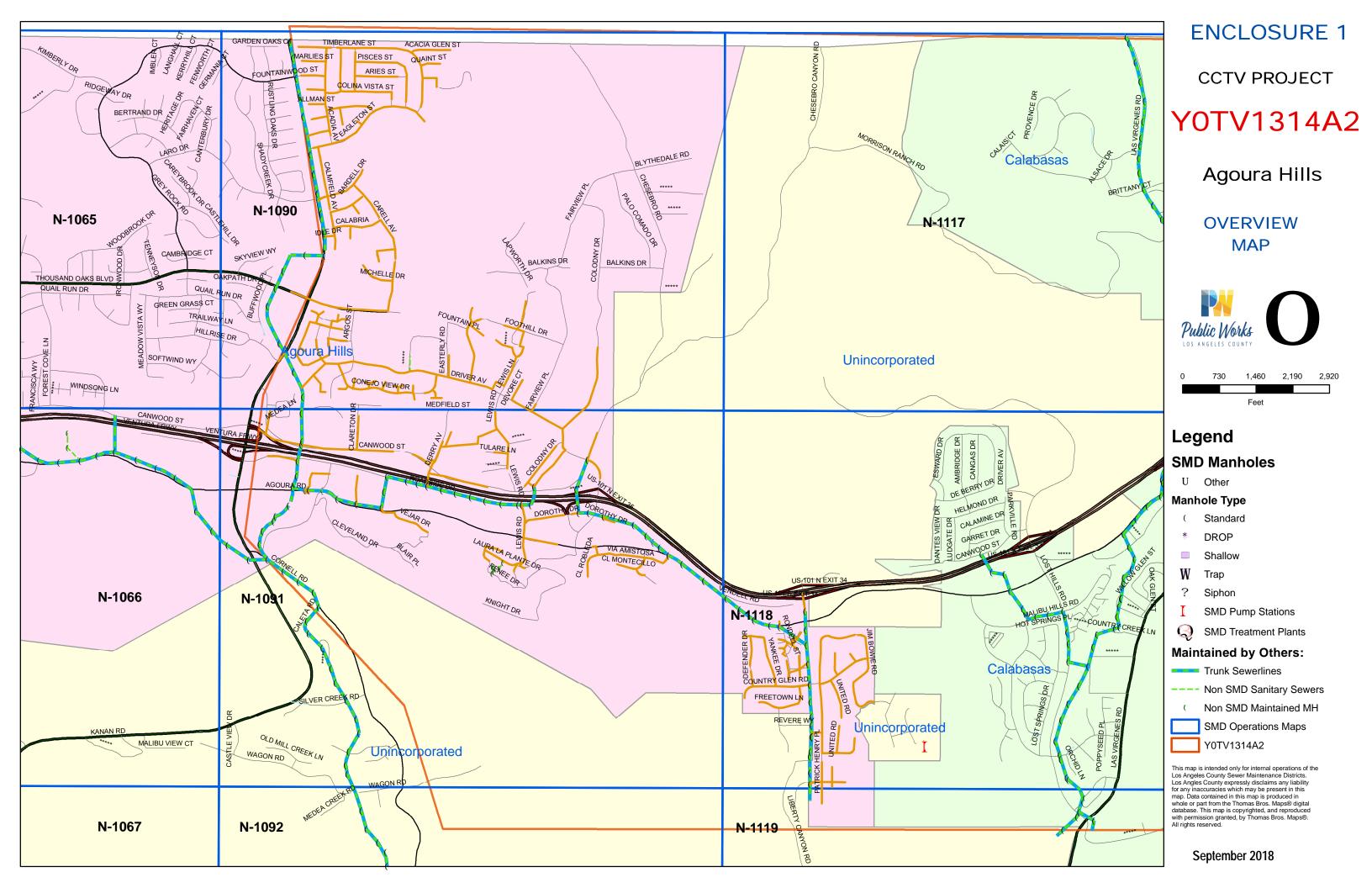
# **CONDITION ASSESSMENT PROJECTS**

The Sewer Condition Assessment Program performed the condition assessment of the sewer lines within the City according to the following schedule:

FISCAL YEAR	PROJECT NAME	LENGTH (FT)	PERCENTAGE OF SYSTEM	STATUS
2005-06	Y0TV0506F	29,407	10.7	COMPLETED
2009-10	Y0TV0910A	157,231	57.0	COMPLETED
2013-14	Y0TV1314A2	88,884	32.3	COMPLETED
TOTAL		275,522	100.0	

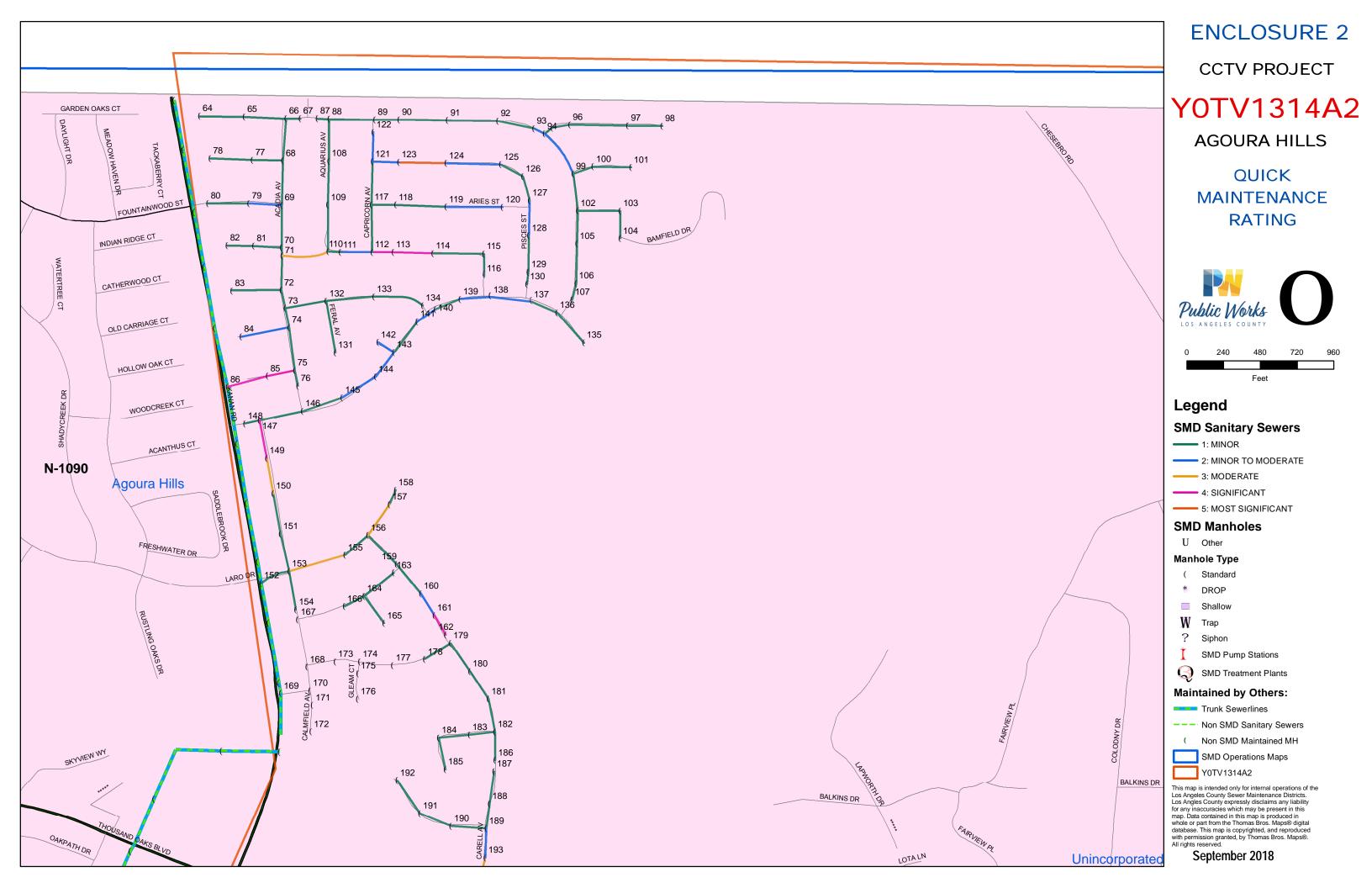
# **ENCLOSURE 1**

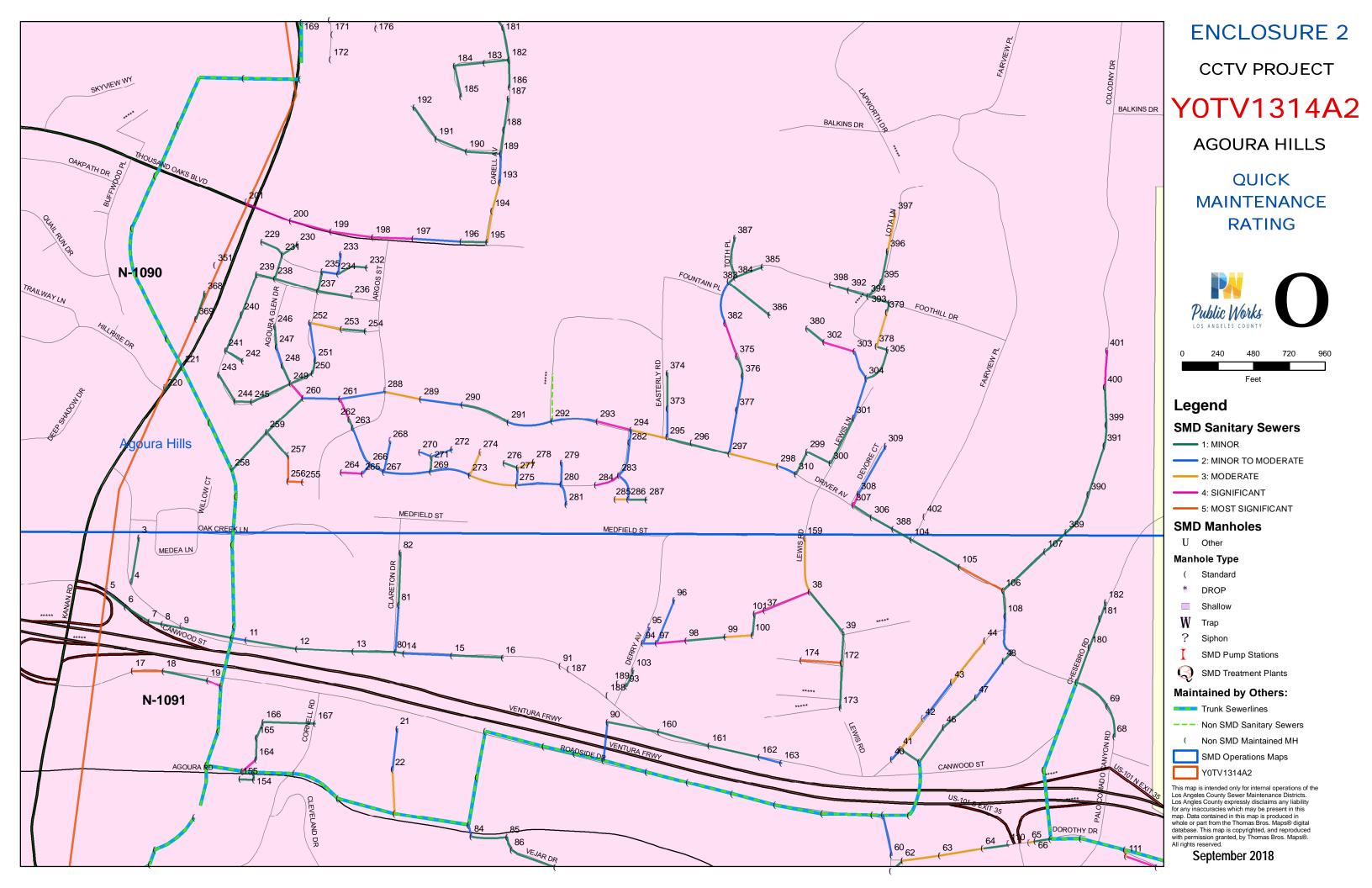
**Project Overview Map** 

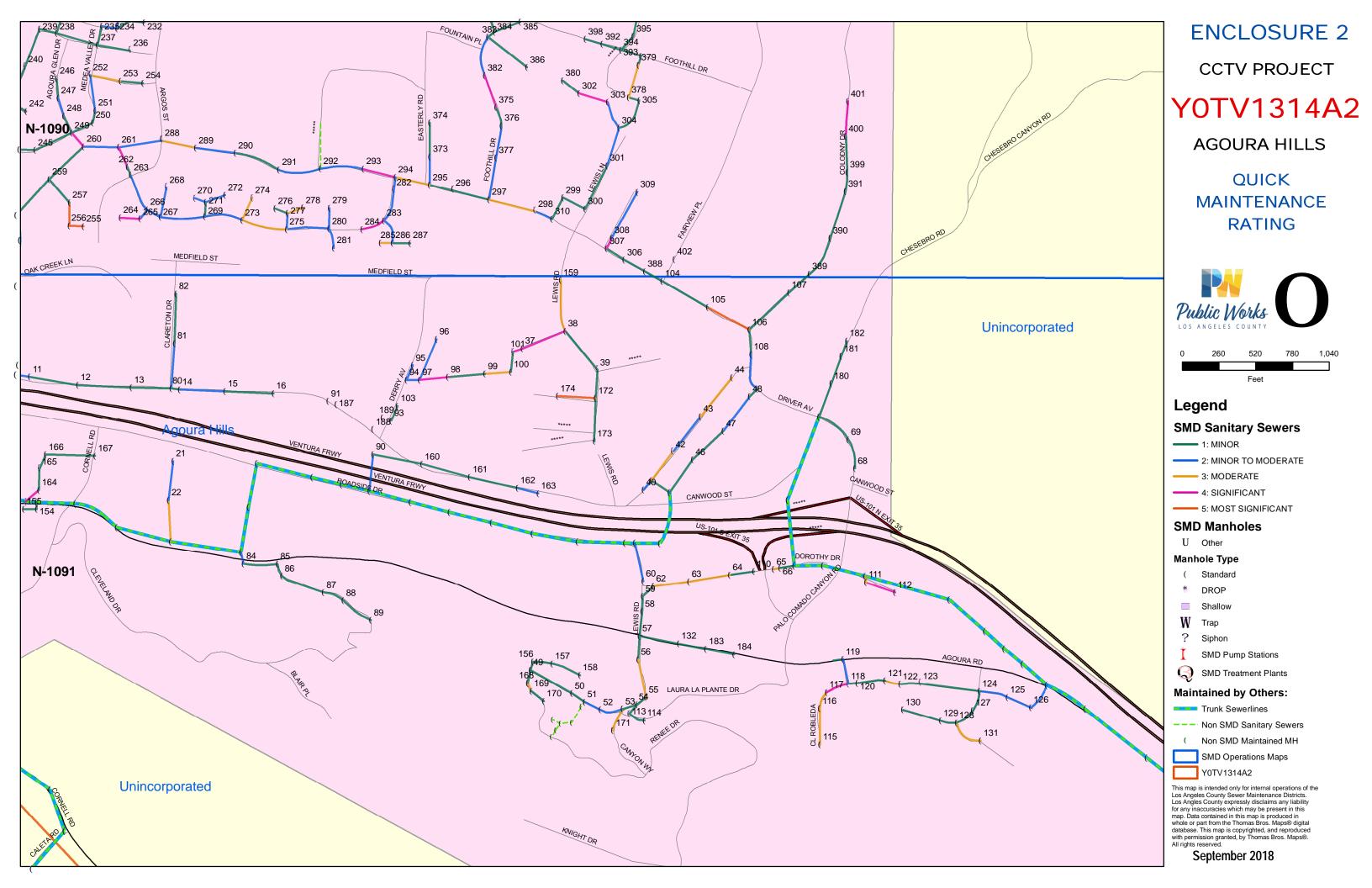


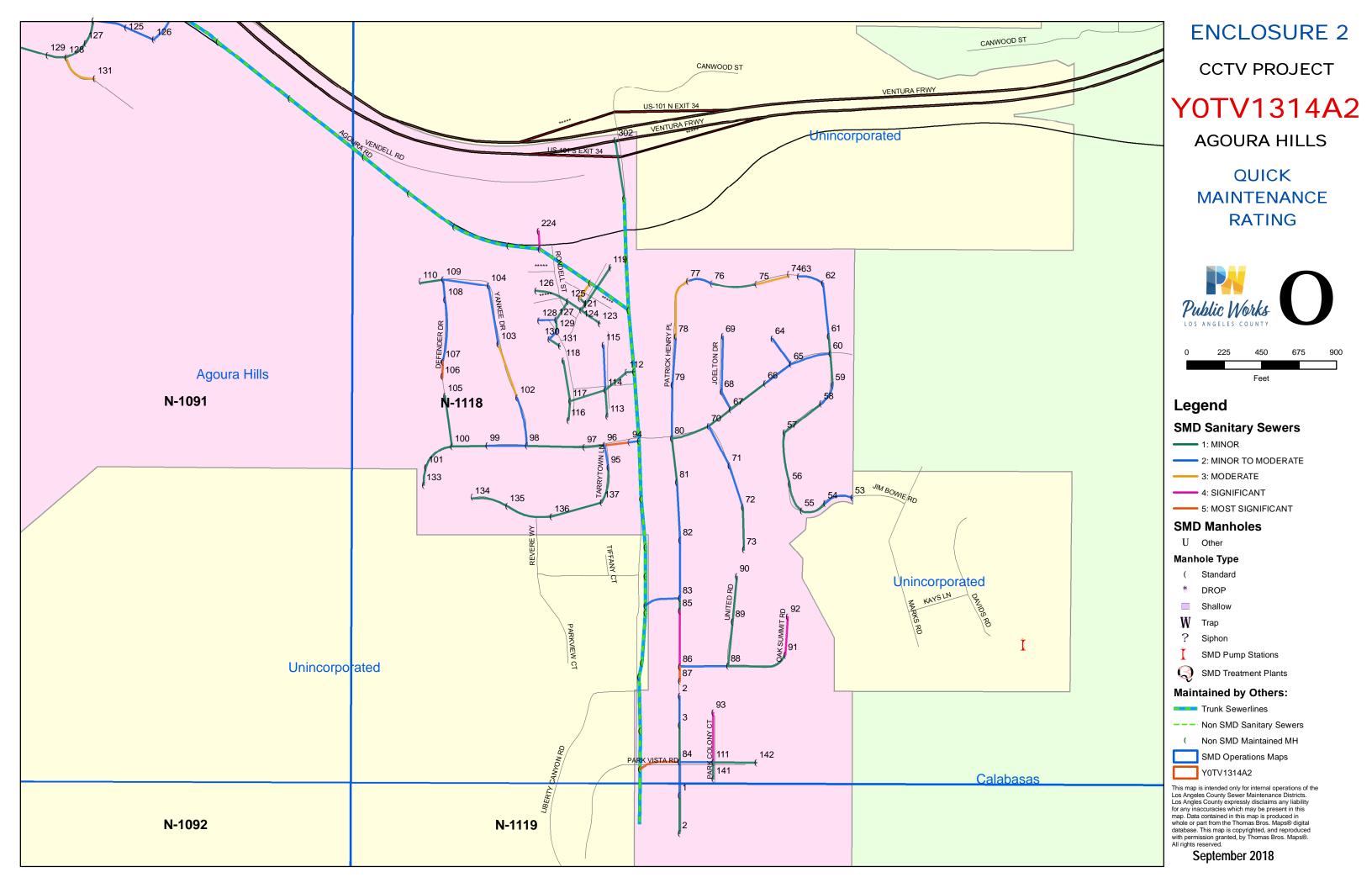
# **ENCLOSURE 2**

- Quick Maintenance Rating Map
- High Water Levels List
- Infiltration List
- High Water Levels and Infiltration Map



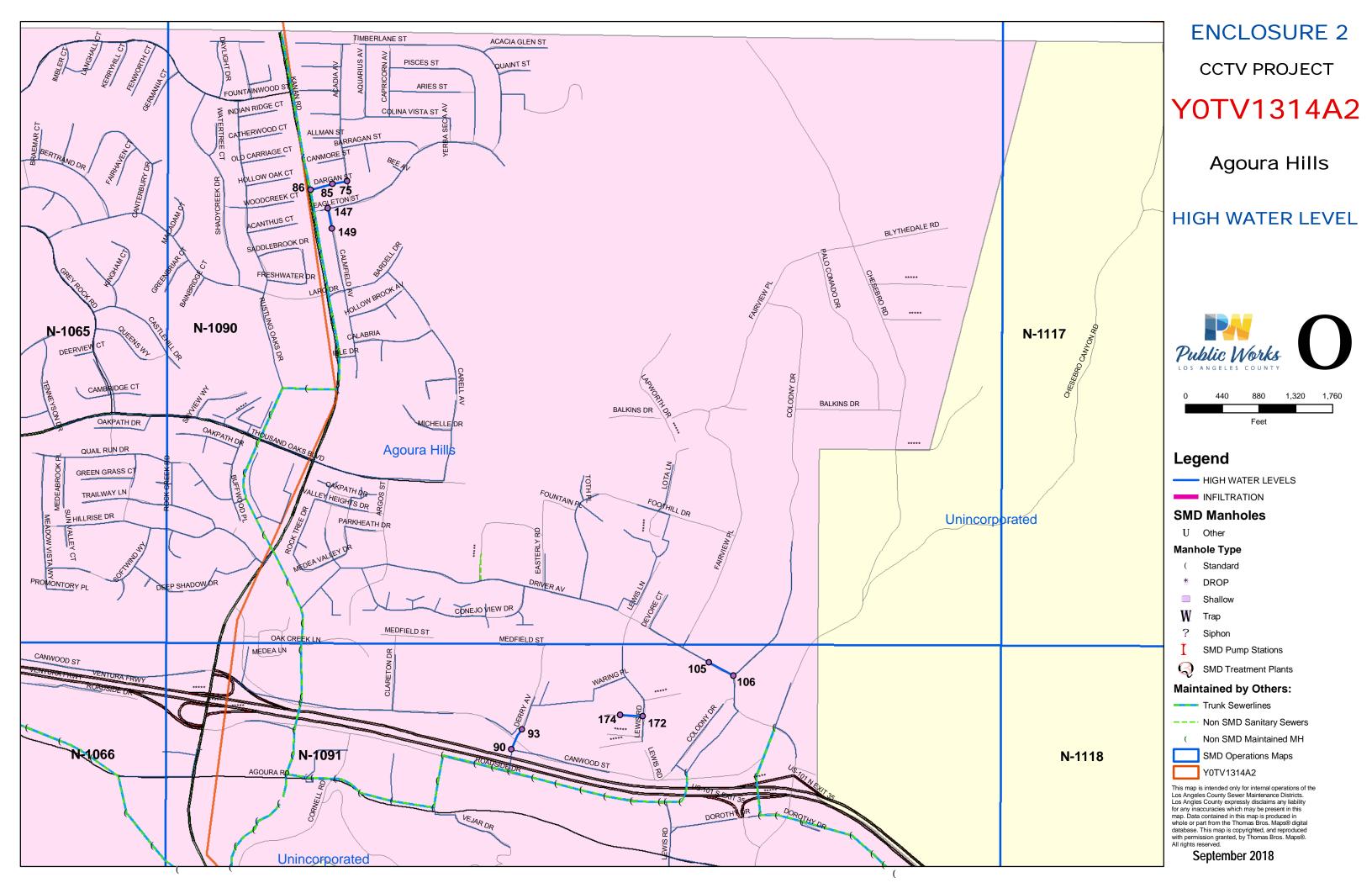






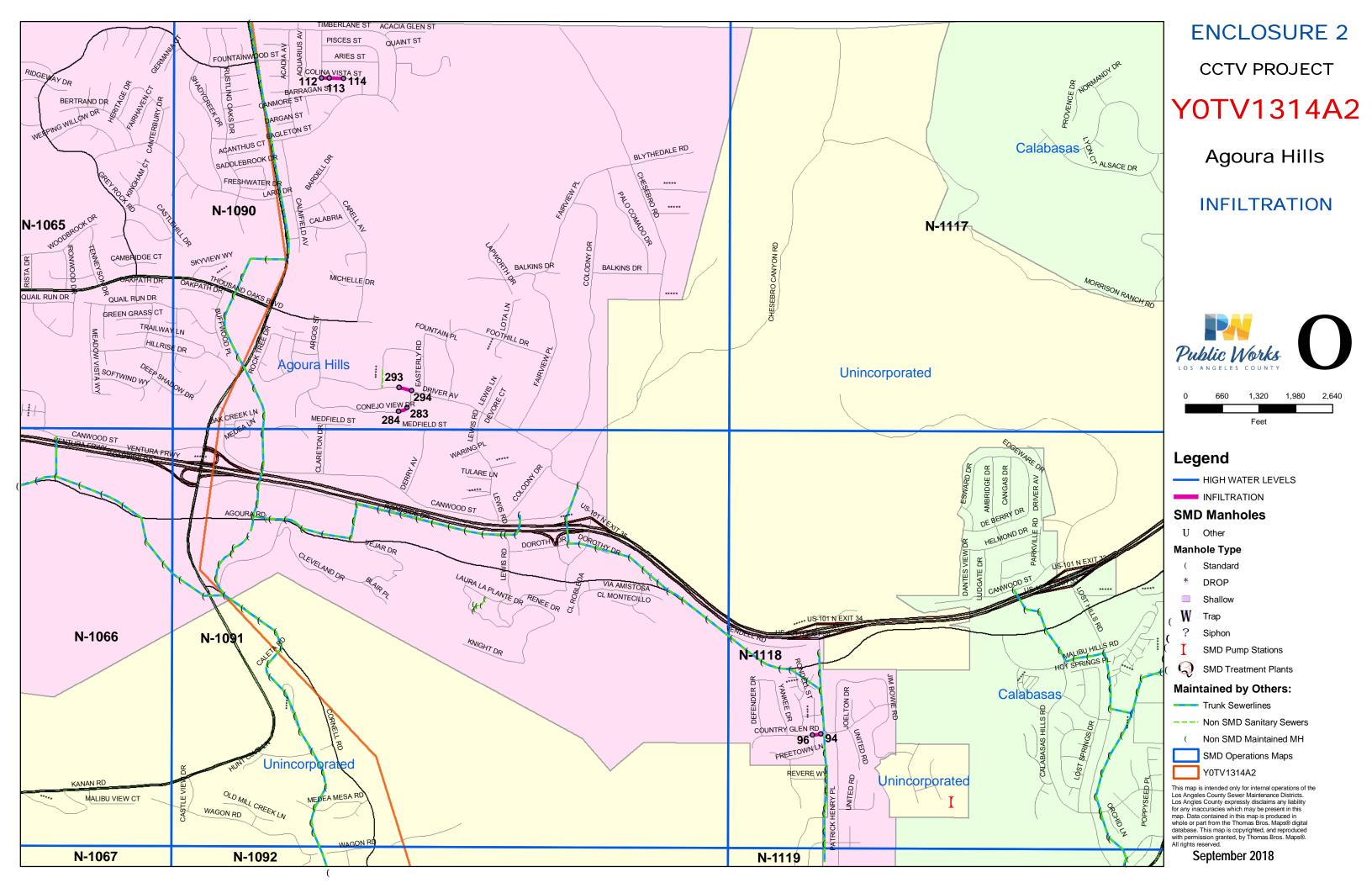
#### ENCLOSURE 2 HIGH WATER LEVELS CITY OFAGOURA HILLS (YOTV1314A2)

ITEM NO.	QMR	START MH	END MH	STREET	OBSERVATION: LOCATION	САРАСПУ	CORRECTIVE ACTION
1	5141	1091-0172	1091-0174	TULARE LN	Water mark (80%)	YES	No action needed*
2	5121	1091-0105	1091-0106	DRIVER AV	Sag	NO	No action needed*
3	4232	1090-0147	1090-0149	CAIMFIELD AV	Camera underwater	YES	No action needed*
4	4200	1090-0085	1090-0086	DARGAN ST	Camera underwater	YES	No action needed*
5	4100	1090-0075	1090-0085	DARGAN ST	Water level high (50%)	YES	No action needed*
6	4100	1091-0090	1091-0093	DERRY AV	Water mark (50%)	YES	No action needed*



# ENCLOSURE 2 INFILTRATION CITY OF AGOURA HILLS (YOTV1314A2)

ITEM NO.	QMR	START MH	END MH	STREET	OBSERVATION: LOCATION	PROPOSED CORRECTIVE METHOD
1	5141	1118-0094	1118-0096	COUNTRY GLEN RD	Infiltration	No action needed
2	4222	1090-0113	1090-0114	COLINA VISTA ST	Infiltration	No action needed
3	4123	1090-0293	1090-0294	DRIVER AV	Infiltration	No action needed
4	4100	1090-0112	1090-0113	COLINA VISTA ST	Infiltration	Injection Grout
5	4100	1090-0283	1090-0284	CONEJO DR	Infiltration	No action needed



# **ENCLOSURE 3**

- Quick Structural Rating Report Priority List
- Quick Structural Rating Map

# ENCLOSURE 3 QUICK STRUCTURAL RATING REPORT PRIORITY LIST CITY OF AGOURA HILLS (YOTV1314A2)

ITEM NO.	START MH	END MH	STREET	OBSERVATION	PROPOSED CORRECTIVE ACTION
1	1118-0067	1118-0070	COUNTRY GLEN RD	Hole	Point Repair
2	1118-0076	1118-0077	PROVIDENT RD	Fracture, Hole	Point Repair
3	1091-0105	1091-0106	DRIVER AV	Deformed	No action needed*
4	1091-WEST	1091-0119	AGOURA RD	Broken	Lining
5	1091-0111	1091-TRNK	DOROTHY DR	Broken	Lining
6	1118-0062	1118-0061	JIM BOWIE RD	Hole	Point Repair
7	1090-0135	1090-0136	EAGLETON ST	Broken	Point Repair
8	1090-0178	1090-0179	CALABRIA DR	Broken	No action needed*
9	1118-0067	1118-0068	JOELTON DR	Fractures	No action needed*
10	1118-0060	1118-0061	JIM BOWIE RD	Fractures	No action needed*
11	1118-0064	1118-0065	GADSHILL IN	Fracture	No action needed*
12	1118-0058	1118-0059	JIM BOWIE RD	Fracture	No action needed*
13	1090-0112	1090-0117	CAPRICORN AV	Fracture	No action needed*
14	1091-0118	1091-0119	CALLE ROBLEDA	Joint offset	No action needed*
15	1118-0057	1118-0058	JIM BOWIE RD	Fractures	Point Repair
16	1118-0100	1118-0101	COUNTRY GLEN RD	Fractures	No action needed*
17	1091-0108	1091-0109	DRIVER AV	Sag	No action needed*
18	1090-0299	1090-0310	DRIVER AV EASEMENT	Fractures	No action needed*
19	1119-0001	1119-0084	PATRICK HENRY PL	Fractures	No action needed*
20	1091-0009	1091-TRNK	CANWOOD ST	Fractures	No action needed*
21	1091-0022	1091-TRNK	AGOURA RD EASEMENT	Fractures	No action needed*
22	1118-0053	1118-0054	JIM BOWIE RD	Broken	Point Repair

<sup>\*</sup>Structural deficiencies are categorized into groups of defects or observations with a wide range of severity. Each of these deficiencies received additional post inspection review and some of these were determined not likely to interfere with the normal operation of the sewer line due to the severity, size, and/or location of the deficiency. These segments will be reviewed during the next cycle of CCTV inspections.

# ENCLOSURE 3 QUICK STRUCTURAL RATING REPORT PRIORITY LIST CITY OF AGOURA HILLS (YOTV1314A2)

ITEM NO.	START MH	END MH	STREET	OBSERVATION	PROPOSED CORRECTIVE ACTION
23	1090-0071	1090-0110	AQUARIUS AV EASEMENT	Fractures	No action needed*
24	1118-0078	1118-0079	PATRICK HENRY PL	Fractures	No action needed*
25	1118-0089	1118-0090	UNITED RD	Fractures	No action needed*
26	1091-0098	1091-0099	DERRY AVE	Fractures	No action needed*
27	1091-0100	1091-0101	WARING PLEASEMENT	Fractures	No action needed*
28	1118-0104	1118-0109	ENDEAVOR ST	Fractures	No action needed*
29	1118-0107	1118-0108	DEFENDER DR	Fractures	No action needed*
30	1118-0109	1118-0110	ENDEAVOR ST	Fractures	No action needed*
31	1090-0110	1090-0111	COLINA VISTA ST	Fractures	No action needed*
32	1090-0111	1090-0112	COLINA VISTA ST	Fractures	No action needed*
33	1090-0112	1090-0113	COLINA VISTA ST	Fractures	No action needed*
34	1118-0114	1118-0117	LIBERTY CANYON RD	Fractures	No action needed*
35	1090-0117	1090-0118	ARIES ST	Fractures	No action needed*
36	1090-0118	1090-0119	ARIES ST	Fractures	No action needed*
37	1090-0155	1090-0156	BARDELL DR	Fractures	No action needed*
38	1090-0182	1090-0181	CARELL AV	Fractures	No action needed*
39	1090-0283	1090-0284	CONEJO DR	Fractures	No action needed*
40	1090-0396	1090-0397	LOTA LN PVT RD	Fractures	No action needed*

<sup>\*</sup>Structural deficiencies are categorized into groups of defects or observations with a wide range of severity. Each of these deficiencies received additional post inspection review and some of these were determined not likely to interfere with the normal operation of the sewer line due to the severity, size, and/or location of the deficiency. These segments will be reviewed during the next cycle of CCTV inspections.

